

CLAIMS

1. A method for the preparation of genetically-modified fibroblasts expressing a muscle lineage commitment gene, which comprises:
- 5 a) ex-vivo transduction of fibroblasts with a therapeutic gene or a gene capable of correcting a gene defect;
- b) transient expression of the muscle lineage commitment gene in fibroblasts transduced as at point (a), through transformation of the cells with a high-efficiency DNA transfer method, wherein the muscle lineage commitment gene is under the control of a strong promoter.
- 10 Sub B1 2. A method according to claim 1, wherein the therapeutic gene is the dystrophin gene.
3. A method according to claim 1, wherein the high-efficiency DNA transfer method is a viral vector.
- 15 Sub B2 4. A method according to claim 3, wherein said viral vector is selected from baculovirus, adeno-related viruses, adeno-virus.
5. A method according to claim 3, wherein said vector is an adenovirus.
6. A method according to claim 1, wherein the muscle lineage commitment gene is selected from MyoD, Myf-5, MRF4 and myogenin.
- 20 7. A method according to claim 6, wherein said gene is MyoD.
8. A method according to claim 1, wherein the muscle lineage commitment gene is under the control of a viral promoter.
- a 9. Genetically-modified fibroblasts obtainable by the method of claims 1-8.
- a 8. 10. Fibroblasts according to claim 9, wherein the muscle lineage commitment gene is MyoD.
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